

Finnhub ([View Documentation](#))

Provides headlines, source, summary, URL, etc. of a particular stock within the date range specified.

Endpoint:

<https://finnhub.io/api/v1/company-news?symbol=AAPL&from=2024-08-15&to=2024-10-21>

API Key: cn8ooc1r01qocbpgs9h0cn8ooc1r01qocbpgs9hg

Dynamic Parameters:

Name	Value	Description
symbol	AAPL, MSFT, NVDA, etc.	Stock Ticker Symbol
from	YYYY-MM-DD (i.e. 2024-08-15)	News pulled from
to	YYYY-MM-DD (i.e. 2024-10-21)	News pulled till

Response:

```
[
  {
    "category": "company",
    "datetime": 1729548000,
    "headline": "A new Qualcomm chip could compete with Apple Intelligence",
    "id": 130641860,
    "image":
"https://media.zenfs.com/en/quartz.com/95509e76f0b5b3d86c93069928099916",
    "related": "AAPL",
    "source": "Yahoo",
    "summary": "Qualcomm's (QCOM) new chip could help drive competition between
Android and Apple's (AAPL) iOS.",
    "url":
"https://finnhub.io/api/news?id=e58165ea72a91974d21ad43107aaba4e110b9b1f980999e02c0eb8
454ab4ab0a"
  },
  {
    "category": "company",
    "datetime": 1729547122,
    "headline": "Apple (AAPL) Advances While Market Declines: Some Information for
Investors",
    "id": 130641862,
    "image":
"https://media.zenfs.com/en/zacks.com/078b2d95159d12a337f09f2519ff10ba",
    "related": "AAPL",
    "source": "Yahoo",
    "summary": "In the closing of the recent trading day, Apple (AAPL) stood at
$236.48, denoting a +0.63% change from the preceding trading day."
  }
]
```

```

        "url":
"https://finnhub.io/api/news?id=1adc8d2ecf3ee7143333d6feb50a4e21717494b9eba670a7307e26
876c9bc051"
    },
    {
        "category": "company",
        "datetime": 1729546559,
        "headline": "Apple iPhone 16 Demand Shows Signs of Recovery: J.P. Morgan",
        "id": 130641864,
        "image": "",
        "related": "AAPL",
        "source": "Yahoo",
        "summary": "J.P. Morgan analysts maintain Overweight rating on Apple stock",
        "url":
"https://finnhub.io/api/news?id=94e42f7bb4418267dda9c230263d14e3c7acacf3c85bda2bb5c183
b4941f670f"
    },
    .
    .
    .
]

```

Limitations:

1. From date can only be one year prior to today in free version
2. There is a 30 API calls/ second limit

Test with Postman:

<https://finnhub.io/api/v1/company-news?symbol=AAPL&from=2024-08-15&to=2024-10-21&token=cn8ooc1r0lqocbpgs9h0cn8ooc1r0lqocbpgs9hg>

Test with Python:

```

import requests

api_url = "https://finnhub.io/api/v1/company-news"
symbol = "AAPL"
from_date = "2024-08-15"
to_date = "2024-10-21"
api_key = "cn8ooc1r0lqocbpgs9h0cn8ooc1r0lqocbpgs9hg"

response =
requests.get(f"{api_url}?symbol={symbol}&from={from_date}&to={to_date}&token={api_key}"
")

if response.status_code == 200:
    news_data = response.json()
    for article in news_data:
        print(f"Headline: {article['headline']}\nDate: {article['datetime']}\nAbout:
{article['related']}\n")
else:
    print(f"Failed to retrieve data. Status code: {response.status_code}")

```

Can also be used with finnhub client, refer to -
<https://github.com/Finnhub-Stock-API/finnhub-python>

Polygon ([View Documentation](#))

Provides title, description, author, all the stocks mentioned, with the sentiment in which they are mentioned for a particular stock in specified date range or on particular date.

Endpoint:

https://api.polygon.io/v2/reference/news?ticker=AAPL&published_utc.gte=2024-08-15&published_utc.lte=2024-10-21

API Key: GdSGxrAOB7yW9hlw3Wym69h4MapsLye5

Dynamic Parameters:

Name	Value	Description
ticker	AAPL, MSFT, NVDA, etc.	Stock Ticker Symbol
published_utc.gte	YYYY-MM-DD (i.e. 2024-08-15)	News pulled from
published_utc.lte	YYYY-MM-DD (i.e. 2024-10-21)	News pulled till

Many other parameters like order, sort, and limiting number of responses can be added.

Response:

```
{
  "results": [
    {
      "id": "fcac74235851beea98ce173fb6ef02094b07afefe47ffb256a2f8572297f7d8f",
      "publisher": {
        "name": "GlobeNewswire Inc.",
        "homepage_url": "https://www.globenewswire.com",
        "logo_url": "https://s3.polygon.io/public/assets/news/logos/globenewswire.svg",
        "favicon_url": "https://s3.polygon.io/public/assets/news/favicons/globenewswire.ico"
      },
      "title": "Purpose Investments Inc. annonce les distributions d'octobre 2024",
      "author": "Na",
      "published_utc": "2024-10-21T23:00:00Z",
      "article_url": "https://www.globenewswire.com/news-release/2024/10/21/2966585/0/fr/Purpose-Investments-Inc-annonce-les-distributions-d-octobre-2024.html",
    }
  ]
}
```

```
    "tickers": [
        "AAPL",
        "MSFT",
        "AMZN",
        "GOOG",
        "GOOGL",
        "NVDA",
        "BRK.A",
        "BRK.B"
    ],
    "image_url":
    "https://ml.globenewswire.com/Resource/Download/a28192cb-6294-4424-8c24-646fee2c81cd",
    "description": "Purpose Investments announced the October 2024
distributions for its ETFs and closed-end funds. The distributions will be paid on
November 4, 2024, to unitholders of record on October 29, 2024.",
    "keywords": [
        "Purpose Investments",
        "ETFs",
        "Closed-End Funds",
        "Distributions"
    ],
    "insights": [
        {
            "ticker": "AAPL",
            "sentiment": "positive",
            "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Apple stock, suggesting the company's performance is strong enough to
warrant inclusion in Purpose's investment products."
        },
        {
            "ticker": "MSFT",
            "sentiment": "positive",
            "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Microsoft stock, indicating the company's performance is considered
attractive for investment purposes."
        },
        {
            "ticker": "AMZN",
            "sentiment": "positive",
            "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Amazon stock, suggesting the company's performance is strong enough to
warrant inclusion in Purpose's investment products."
        },
        {
            "ticker": "GOOG",
            "sentiment": "positive",
            "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Alphabet (Google) stock, indicating the company's performance is considered
attractive for investment purposes."
        },
        {
            "ticker": "GOOGL",
            "sentiment": "positive",
```

```

        "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Alphabet (Google) stock, indicating the company's performance is considered
attractive for investment purposes."
    },
    {
        "ticker": "NVDA",
        "sentiment": "positive",
        "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the NVIDIA stock, suggesting the company's performance is strong enough to
warrant inclusion in Purpose's investment products."
    },
    {
        "ticker": "BRK.A",
        "sentiment": "positive",
        "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Berkshire Hathaway stock, indicating the company's performance is
considered attractive for investment purposes."
    },
    {
        "ticker": "BRK.B",
        "sentiment": "positive",
        "sentiment_reasoning": "The article mentions the Purpose ETF that
tracks the Berkshire Hathaway stock, indicating the company's performance is
considered attractive for investment purposes."
    }
]
},
{
    "id": "657abffe9ac4db5fccb30e2e19866f16bd7e1648bd9db90783f3073445ebcc55",
    "publisher": {
        "name": "The Motley Fool",
        "homepage_url": "https://www.fool.com/",
        "logo_url":
"https://s3.polygon.io/public/assets/news/logos/themotleyfool.svg",
        "favicon_url":
"https://s3.polygon.io/public/assets/news/favicons/themotleyfool.ico"
    },
    "title": "Could Taiwan Semiconductor Manufacturing Stock Help You Retire a
Millionaire?",
    "author": "Jeremy Bowman",
    "published_utc": "2024-10-21T22:15:00Z",
    "article_url":
"https://www.fool.com/investing/2024/10/21/could-taiwan-semiconductor-manufacturing-st
ock-hel/?source=iedfolrf0000001",
    "tickers": [
        "INTC",
        "NVDA",
        "AVGO",
        "AMD",
        "AAPL"
    ],
    "image_url":
"https://g.foolcdn.com/editorial/images/794544/a-semiconductor-chip-being-made.jpg",
    "description": "TSMC, the world's largest contract chip manufacturer, has
a dominant market share and strong competitive advantages. With AI demand and a

```

rebound in other sectors, TSMC is poised for continued growth, making it a smart addition to investment portfolios.",

```

    "keywords": [
      "TSMC",
      "semiconductor industry",
      "AI",
      "chip manufacturing"
    ],
    "insights": [
      {
        "ticker": "INTC",
        "sentiment": "negative",
        "sentiment_reasoning": "The article mentions that Intel is
struggling, with a massive restructuring and cuts in capital expenditures, potentially
setting up its foundry business to be sold. This suggests challenges for Intel
compared to the strong performance of TSMC."
      },
      {
        "ticker": "NVDA",
        "sentiment": "positive",
        "sentiment_reasoning": "The article mentions that TSMC makes all
of Nvidia's data center components, allowing it to share in the spoils of the AI boom,
suggesting a positive relationship and growth opportunity for Nvidia."
      },
      {
        "ticker": "AVGO",
        "sentiment": "positive",
        "sentiment_reasoning": "The article lists Broadcom as one of the
companies that relies on TSMC to manufacture its chips, indicating a positive
relationship and potential growth opportunity for Broadcom."
      },
      {
        "ticker": "AMD",
        "sentiment": "positive",
        "sentiment_reasoning": "The article mentions that AMD is one of
the companies that relies on TSMC to manufacture its chips, suggesting a positive
relationship and potential growth opportunity for AMD."
      },
      {
        "ticker": "AAPL",
        "sentiment": "positive",
        "sentiment_reasoning": "The article states that Apple is one of
the companies that relies on TSMC to manufacture its chips, indicating a positive
relationship and potential growth opportunity for Apple."
      }
    ]
  },
  {
    "id": "c398567781d4c1d9f68ac537ba22bf3de059107b2591f4bc6eb2fc27ea3c610f",
    "publisher": {
      "name": "The Motley Fool",
      "homepage_url": "https://www.fool.com/",
      "logo_url":
"https://s3.polygon.io/public/assets/news/logos/themotleyfool.svg",

```

```

        "favicon_url":
"https://s3.polygon.io/public/assets/news/favicons/themotleyfool.ico"
    },
    "title": "Is Microsoft Going to $505? 1 Wall Street Analyst Thinks So",
    "author": "Jeremy Bowman",
    "published_utc": "2024-10-21T12:25:00Z",
    "article_url":
"https://www.fool.com/investing/2024/10/21/is-microsoft-going-to-505-1-wall-street-ana
lyst-th/?source=iedfolrf0000001",
    "tickers": [
        "MSFT",
        "AAPL",
        "NVDA"
    ],
    "image_url":
"https://g.foolcdn.com/editorial/images/794606/investor-reading-the-newspaper.jpg",
    "description": "Microsoft, once a leader in AI through its partnership
with OpenAI, is now facing challenges as competitors like Apple and Nvidia gain
ground. The company's stock has fallen 10% from its peak, and it has lost its title as
the world's most valuable company to Apple. While Microsoft remains the dominant
enterprise software company, it faces questions about its AI investments and its
partnership with OpenAI.",
    "keywords": [
        "Microsoft",
        "AI",
        "OpenAI",
        "Apple",
        "Nvidia",
        "enterprise software"
    ],
    "insights": [
        {
            "ticker": "MSFT",
            "sentiment": "negative",
            "sentiment_reasoning": "Microsoft is facing challenges as
competitors like Apple and Nvidia gain ground in the AI space. The company's stock has
fallen 10% from its peak, and it has lost its title as the world's most valuable
company to Apple. There are also questions about the company's AI investments and its
partnership with OpenAI."
        },
        {
            "ticker": "AAPL",
            "sentiment": "positive",
            "sentiment_reasoning": "Apple's new Apple Intelligence AI platform
is enticing investors away from Microsoft, suggesting the company is making progress
in the AI space."
        },
        {
            "ticker": "NVDA",
            "sentiment": "positive",
            "sentiment_reasoning": "Nvidia's Blackwell platform is also
attracting investor interest, indicating the company is a strong competitor in the AI
market."
        }
    ]
}

```

```

        },
    },
    .
    .
    .
  ]}

```

Limitations:

1. From date can only be two year prior to today in free version
2. There is a 5 API Calls / Minute limit

Test with Postman:

https://api.polygon.io/v2/reference/news?ticker=AAPL&published_utc.gte=2024-08-15&published_utc.lte=2024-10-21&apiKey=GdSGxrAOB7yW9hlw3Wym69h4MapsLye5

Test with Python:

```

import requests

api_url = "https://api.polygon.io/v2/reference/news"
params = {
    'ticker': 'AAPL',
    'published_utc.gte': '2024-08-15',
    'published_utc.lte': '2024-10-21',
    'apiKey': 'YOUR_API_KEY'
}

response = requests.get(api_url, params=params)

if response.status_code == 200:
    news_data = response.json()
    # Display each article's title and publication date
    for article in news_data.get('results', []):
        print(f"Title: {article['title']}\nPublished: {article['published_utc']}\nURL: {article['article_url']}\n")
    else:
        print(f"Failed to retrieve data. Status code: {response.status_code}")

```

Newsfilter ([View Documentation](#))

Provides headlines, source, summary, URL, etc. of a particular stock within the date range specified. It can be used to get information about TSLA SEC filings filed in last 30 days, Merger articles, FDA Approvals, Articles not including "4 Form" as well.

Endpoint: <https://api.newsfilter.io/search>

API Key: <>

Dynamic Parameters:

Name	Value	Description
symbols	AAPL, MSFT, NVDA, etc.	Stock Ticker Symbol
publishedAt	[2020-02-01 TO 2020-05-20]	Date Range

Sent in a queryString like

```
queryString = "symbols:NFLX AND publishedAt:[2020-02-01 TO 2020-05-20]"
```

Response:

```
{
  "total": {
    "value": 6610,
    "relation": "eq"
  },
  "from": 0,
  "size": 10,
  "sort": [
    {
      "publishedAt": {
        "order": "desc"
      }
    }
  ],
  "articles": [
    {
      "source": {
        "id": "bloomberg",
        "name": "Bloomberg"
      },
      "symbols": ["MSFT", "COTY"],
      "title": "There Isn't a Single Down Stock in the S&P Over Last 10 Weeks",
      "description": "Here's something to consider with the S&P 500 on the verge of erasing all its 2020 losses: Ever since the benchmark bottomed in March, every single one of its members has posted a positive return.",
      "sourceUrl": "https://www.bloomberg.com/news/articles/2020-06-08/there-isn-t-a-single-down-stock-in-the-s-p-over-last-10-weeks",
      "imageUrl": "https://assets.bwbx.io/images/users/iqjWHBFdfxIU/iFFvjKH9uTwE/v0/-1x-1.png",
      "publishedAt": "2020-06-08T15:50:02.473Z",
      "id": "25a5e721982ce5b75f340c2d30bc7bc3",
      "industries": [
        "Software - Infrastructure",
        "Household & Personal Products"
      ],
      "sectors": ["Technology", "Consumer Defensive"]
    },
    {
      "source": {
```

```

        "id": "bloomberg",
        "name": "Bloomberg"
    },
    "symbols": ["C"],
    "title": "Citigroup Sees Illinois Bonds Already Pricing In Worst Outcome",
    "description": "When it comes to Illinois bonds, Citigroup Inc. says the
worst-case-scenario has already been priced in.",
    "sourceUrl":
"https://www.bloomberg.com/news/articles/2020-06-08/citigroup-sees-illinois-bonds-alre
ady-pricing-in-worst-outcome",
    "imageUrl":
"https://assets.bwbx.io/images/users/iqjWHBFdfxIU/i4xxGH1AndIg/v2/-1x-1.png",
    "publishedAt": "2020-06-08T17:30:17.263Z",
    "id": "65c8a53206ed9f030bd4cb18552bdaf0",
    "industries": ["Banks - Global"],
    "sectors": ["Financial Services"]
},
{
    "source": {
        "id": "bloomberg",
        "name": "Bloomberg"
    },
    "symbols": ["TSLA"],
    "title": "Tesla Hails Air-Quality Effects of Shutdowns Elon Musk Called
Fascist",
    "description": "Tesla Inc. is proffering a decidedly different take on the
coronavirus-related shutdowns Elon Musk called "fascist" and sued over weeks ago by
suggesting they may bolster the case for banning internal-combustion engine cars.",
    "sourceUrl":
"https://www.bloomberg.com/news/articles/2020-06-08/tesla-hails-air-quality-effects-of
-shutdowns-musk-called-fascist",
    "imageUrl":
"https://assets.bwbx.io/images/users/iqjWHBFdfxIU/i3CTYqmBlg6o/v1/-1x-1.jpg",
    "publishedAt": "2020-06-08T17:29:57.367Z",
    "id": "15524708278c27207c1fb617acc598c6",
    "industries": ["Auto Manufacturers"],
    "sectors": ["Consumer Cyclical"]
}
]
}

```

Limitations:

1. From date can only be one month prior to today in free version
2. There is a 100 API calls per day limit
3. 5 articles / news request

Test with Postman:

https://api.newsfilter.io/search?token=YOUR_API_KEY

Test with Python:

import requests

API_KEY = "YOUR_API_KEY"

```

API_ENDPOINT = "https://api.newsfilter.io/search?token={}".format(API_KEY)

# Define the news search parameters
queryString = "symbols:NFLX AND publishedAt:[2020-02-01 TO 2020-05-20]"

payload = {
    "queryString": queryString,
    "from": 0,
    "size": 10
}

# Send the search query to the Search API
response = requests.post(API_ENDPOINT, json=payload)

# Read the response
articles = response.json()

print(articles)

```

Alpha Vantage ([View Documentation](#))

Provides headlines, source, summary, URL, etc. of a particular stock within the date range specified. It can be used to get Sentiment score and relevance score to different topics.

Endpoint:

https://www.alphavantage.co/query?function=NEWS_SENTIMENT&tickers=AAPL&time_from=20240815T0000&time_to=20241021T0000

API Key: T87U1F9H740D5KAM

Dynamic Parameters:

Name	Value	Description
tickers	AAPL, MSFT, NVDA, etc.	Stock Ticker Symbol
time_from	YYYYMMDDTHHMM (i.e. 20240815T0000)	News pulled from
time_to	YYYYMMDDTHHMM (i.e. 20241021T0000)	News pulled till

Response:

```

{
    "items": "50",

```

```

    "sentiment_score_definition": "x <= -0.35: Bearish; -0.35 < x <= -0.15: Somewhat-Bearish; -0.15 < x < 0.15: Neutral; 0.15 <= x < 0.35: Somewhat_Bullish; x >= 0.35: Bullish",
    "relevance_score_definition": "0 < x <= 1, with a higher score indicating higher relevance.",
    "feed": [
        {
            "title": "Apple ( AAPL ) Advances While Market Declines: Some Information for Investors",
            "url": "https://www.zacks.com/stock/news/2354344/apple-aapl-advances-while-market-declines-some-information-for-investors",
            "time_published": "20241021T214522",
            "authors": [
                "Zacks Equity Research"
            ],
            "summary": "In the closing of the recent trading day, Apple (AAPL) stood at $236.48, denoting a +0.63% change from the preceding trading day.",
            "banner_image": "https://staticx-tuner.zacks.com/images/default_article_images/default247.jpg",
            "source": "Zacks Commentary",
            "category_within_source": "n/a",
            "source_domain": "www.zacks.com",
            "topics": [
                {
                    "topic": "Earnings",
                    "relevance_score": "0.95493"
                },
                {
                    "topic": "Technology",
                    "relevance_score": "1.0"
                },
                {
                    "topic": "Financial Markets",
                    "relevance_score": "0.316726"
                }
            ],
            "overall_sentiment_score": 0.190463,
            "overall_sentiment_label": "Somewhat-Bullish",
            "ticker_sentiment": [
                {
                    "ticker": "AAPL",
                    "relevance_score": "0.479683",
                    "ticker_sentiment_score": "0.233516",
                    "ticker_sentiment_label": "Somewhat-Bullish"
                }
            ]
        },
        {
            "title": "Podcast Market to Grow by USD 2.21 Billion ( 2024-2028 ) , Driven by Smartphone Penetration and Easy Internet Access, AI-Driven Insights Report by Technavio",
            "url": "https://www.benzinga.com/pressreleases/24/10/n41440437/podcast-market-to-grow-by-usd-2-21-billion-2024-2028-driven-by-smartphone-penetration-and-easy-int",

```

```
"time_published": "20241021T211500",
"authors": [
  "PRNewswire"
],
"summary": "NEW YORK, Oct. 21, 2024 /PRNewswire/ -- Report on how AI is
driving market transformation- The global podcast market size is estimated to grow by
USD 2.21 billion from 2024-2028, according to Technavio. The market is estimated to
grow at a CAGR of over 36.5% during the forecast period.",
"banner_image":
"https://mma.prnewswire.com/media/2534582/Podcast_Market.jpg",
"source": "Benzinga",
"category_within_source": "General",
"source_domain": "www.benzinga.com",
"topics": [
  {
    "topic": "Financial Markets",
    "relevance_score": "0.108179"
  },
  {
    "topic": "Manufacturing",
    "relevance_score": "0.5"
  },
  {
    "topic": "Technology",
    "relevance_score": "0.5"
  },
  {
    "topic": "Blockchain",
    "relevance_score": "0.158519"
  }
],
"overall_sentiment_score": 0.407169,
"overall_sentiment_label": "Bullish",
"ticker_sentiment": [
  {
    "ticker": "SSNLF",
    "relevance_score": "0.029078",
    "ticker_sentiment_score": "0.252535",
    "ticker_sentiment_label": "Somewhat-Bullish"
  },
  {
    "ticker": "GOOG",
    "relevance_score": "0.029078",
    "ticker_sentiment_score": "0.0",
    "ticker_sentiment_label": "Neutral"
  },
  {
    "ticker": "AAPL",
    "relevance_score": "0.029078",
    "ticker_sentiment_score": "0.0",
    "ticker_sentiment_label": "Neutral"
  },
  {
    "ticker": "IHRT",
    "relevance_score": "0.029078",
```

```

        "ticker_sentiment_score": "0.0",
        "ticker_sentiment_label": "Neutral"
    },
    {
        "ticker": "SPOT",
        "relevance_score": "0.029078",
        "ticker_sentiment_score": "0.0",
        "ticker_sentiment_label": "Neutral"
    },
    {
        "ticker": "SIRI",
        "relevance_score": "0.029078",
        "ticker_sentiment_score": "0.0",
        "ticker_sentiment_label": "Neutral"
    },
    {
        "ticker": "SONO",
        "relevance_score": "0.029078",
        "ticker_sentiment_score": "0.252535",
        "ticker_sentiment_label": "Somewhat-Bullish"
    },
    {
        "ticker": "SQ",
        "relevance_score": "0.029078",
        "ticker_sentiment_score": "0.0",
        "ticker_sentiment_label": "Neutral"
    }
]
},
.
.
.
}

```

Limitations:

1. From date can only be ?? in free version
2. There is a 25 requests per day limit

Test with Postman:

https://www.alphavantage.co/query?function=NEWS_SENTIMENT&tickers=AAPL&time_from=20240815T0000&time_to=20241021T0000&apikey=T87U1F9H740D5KAM

Test with Python:

import requests

```

api_url = "https://www.alphavantage.co/query"
params = {
    "function": "NEWS_SENTIMENT",
    "tickers": "AAPL",
    "time_from": "20240815T0000",
    "time_to": "20241021T0000",
    "apikey": "T87U1F9H740D5KAM"
}

```

```
response = requests.get(api_url, params=params)

if response.status_code == 200:
    news_data = response.json() # Convert the response to JSON format
    # Print the news data for the ticker
    print(news_data)
else:
    print(f"Error: {response.status_code}, {response.text}")
```